Measures of Progress in Foreign Language and Cross-Cultural Awareness: A Preliminary Report

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Introduction

In this paper we report some initial steps to document the progress in foreign language ability and cross-cultural awareness of the current cohort of students in the Department of International Cultural Studies at Morioka Junior College. As a matter of routine we test each student cohort on the ITP-Pre TOEFL at entrance and two years later at graduation. To this measure we have added the Cross-Cultural Adaptability Inventory, or CCAI (Kelley and Myers, 1986) and the Intercultural Development Inventory, or IDI (Hammer and Bennett, 1999, 2001).

The CCAI is a criterion-based self-reporting measure which shows a person's percentage ranking on a series of scales shown in research to be associated with successful cross-cultural adaptation. The IDI is a theory-based psychometric measure of a person's perception of cultural difference.

We looked at the measure of language ability, the ITP-Pre TOEFL, in relation to the two measures of cultural awareness, as well as comparing the results of the CCAI and IDI to each other.

Our purpose in employing these measures of language ability and cross-cultural awareness is part of a long-term assessment of the impact of our department's two-year curriculum. In its promotional literature, the Department of International Cultural Studies speaks of developing people with a "cosmopolitan spirit." It also asserts that its students should be "well-balanced." By this, the department means that its graduates have a solid cultural identity based on a thorough understanding of their local region and of Japan as a whole, as well as familiarity with different cultural values and an ability to communicate with people from a variety of backgrounds.

This strikes us as a worthy but ambitious goal for a two-year program, particularly because very few of our students have had any international or cross-cultural experience before entering the program[1]. In administering the CCAI and IDI in addition to the Pre-TOEFL, we hope to go beyond our current assessment of students' language ability and begin to evaluate how the program might be fulfilling its less tangible goal of developing "kokusai jin" or internationally-minded people. In addition, we hope to discover any links between students' English ability and their cross-cultural sensitivity or competence.

As the Test of English as a Foreign Language (TOEFL) exam is so widely used, we feel it requires no explanation. The CCAI and IDI however, will be introduced in the following section.

CCAI. The Cross-Cultural Adaptation Inventory (CCAI) was designed to be used as a component of training sessions aimed at increasing cross-cultural effectiveness. The instrument is built on the concept

of cross-cultural effectiveness, and reflects factors that are consistently identified in the literature as being important for successful cross-cultural functioning.

Colleen Kelley, a human relations consultant specializing in cross-cultural training, and Judith Meyers, a psychologist, began creating the CCAI in 1986 after finding that although major factors involved in cross-cultural adaptability were cited in the literature, almost no usable materials were readily available to cross-cultural educators.

Consulting the available literature, Kelley and Meyers first developed a composite list of all traits and skills associated with the ability to adapt effectively to other cultures. According to the *CCAI Manual* (Kelley and Myers, 1995), this preliminary checklist of 58 rated items and one fill-in item was given to 25 "cross-cultural specialists" who rated the importance of each item on the list. The 16 most highly rated items proved to also be the skills most often cited in the research literature.

These skills were initially grouped into five skill sets: emotional resilience, flexibility and openness, perceptual acuity, positive regard for others, and personal autonomy. Ten items for each of the five were written for the initial form of the inventory that was tested using a panel of cross-cultural experts and interested members of the general public. Following this initial testing, a pool of cross-cultural trainers administered the CCAI to 653 people and analyzed the results. On the basis of this analysis, one dimension (positive regard for others) was eliminated because it became clear that it was a subset of another dimension (flexibility and openness). In 1991, further testing produced the present version of the CCAI, published in 1992, with the remaining four components of emotional resilience, flexibility and openness, perceptual acuity, and personal autonomy (Kelley and Myers, 1995). These components, described in the *CCAI Manual*, include:

Emotional resilience refers to a person's ability to "bounce back" from difficult or frustrating experiences. Culture shock, often considered to be inherent in the cross-cultural experience, generally includes some negative affect. An individual's ability to modulate, deal with, and recover from this negative reaction on an ongoing basis is very important to long-term adaptation.

Flexibility and openness are key traits for cross-cultural competence. A nonjudgmental attitude and flexible role behavior are cited often in the literature as major components of cross-cultural effectiveness. Broad-mindedness and a curiosity and interest in understanding others are other ways of describing these traits.

Perceptual acuity involves cultural empathy. It refers to the skill of understanding the logic and coherence of other cultures as well as the restraint to avoid negative attributions based on perceived differences between one's own and others' behavior. Many researchers point out the importance of communication competence in adapting to another culture. This includes not only language proficiency but also the ability to understand verbal and nonverbal cues within the context of a social relationship.

Personal Autonomy or a strong sense of identity has also been identified as necessary for

confident interaction with a host culture. A person with a strong sense of self can remain open to experiencing a new culture without feeling threatened by differences or without wanting to abandon his or her own culture in favor of the new one. This high self-esteem allows one to have respect for the host culture - often cited as a major component of cross-cultural effectiveness.

IDI. The Intercultural Development Inventory (IDI) is a self-assessment inventory which focuses on how individuals construe their social world, including their perception of cultural differences between themselves and people from other social/ cultural groups.

The IDI is the result of collaboration between Mitchell Hammer, a professor of intercultural communication at The American University in Washington, D.C., and Milton Bennett, co-director of the Intercultural Communication Institute, Portland, Oregon. It is a 50-item instrument that empirically measures five orientations toward cultural difference based on Bennett's (1993) Developmental Model of Intercultural Sensitivity (DMIS).

After years of observing people in various intercultural settings, Dr. Bennett noticed that the learners appeared to confront cultural difference in some predictable ways. He organized these observations into six stages of increasing sensitivity to cultural difference. The model is based on the assumption that as "one's experience of cultural difference becomes more sophisticated, one's competence in intercultural relations potentially increases" (Hammer and Bennett 1998, 2001). Bennett assumed that each stage was indicative of a particular worldview structure and therefore, the DMIS is a model of the development of worldview structure rather than a model of attitude change, skill acquisition, or traits.

According to the *IDI Manual* (Hammer and Bennett 1998, 2001), the first three DMIS stages are *ethnocentric*, meaning that one's own culture is experienced as central to reality in some way. In the first stage, Denial, one's culture is experienced as the only real one and consideration of other cultures is avoided. In Defense, one's own culture (or an adopted culture) is experienced as the only good one, and cultural difference is denigrated. In Minimization, elements of one's own culture are experienced as universal, so that despite acceptable surface differences, deep down other cultures are seen as essentially similar to one's own.

The second three DMIS stages are *ethnorelative*, meaning that one's own culture is experienced in the context of other cultures. In Acceptance, other cultures are experienced as equally complex but different constructions of reality. In Adaptation, one gains the ability to shift perspective in and out of another cultural worldview. Finally, in Integration, one's experience of self is expanded to include the movement in and out of different cultural worldviews.

To create the IDI, Hammer and Bennett (1998, 2001) developed a qualitative interview guide which was designed to elicit perceptions of a group of respondents from a variety of cultures concerning their experience with cultural difference. A total of 40 men and women representing a wide range of ages were interviewed.

Transcripts of the interviews were then reviewed and the researchers rated the overall stage that the interviewee most consistently expressed during the interview. Actual statements made by interviewees plus a small number of items generated by Bennett and Hammer comprised the initial 239 IDI items. This pilot version of the IDI was administered to culturally diverse groups of people to identify any difficulties and, based on feedback from respondents, the IDI underwent further revision. A panel of intercultural communication experts then reviewed the remaining items and a revised version of the IDI (145 items) was administered to a large sample of subjects (226). Further analysis and revision resulted in the current 50 item version of the IDI.

An IDI score is calculated with a computer software program and yields two main results. One result is the Overall Perceived Intercultural Sensitivity Profile, which indicates the stage that the group or individuals see themselves in. The other result is the Overall Developmental Intercultural Sensitivity Profile, which measures actual sensitivity to cultural difference. There is often a significant difference between the two profiles, with the *perceived* sensitivity farther along on the DMIS scale than the *developmental* (actual) sensitivity.

The Developmental Profile generated for a person can be further broken down into more detailed components. The 50 IDI questions can be matched to 4 scales which correspond to the DMIS stages and can in turn be divided into clusters. Each scale is shown as a bar graph with three phases: unresolved, in transition, and resolved. The IDI examinee's numerical score for each scale is shown on the graph in one of the three phases.

The IDI scales are described in the IDI Profile (Bennett and Hammer, 2002) generated by the IDI analysis software as follows: The Denial/ Defense Scale, indicating a worldview that simplifies and/or polarizes cultural difference, is composed of the Defense Cluster, a tendency to view "us" as better than "them," and the Denial Cluster, a tendency to withdraw from cultural difference. The Denial Cluster is further separated into disinterest in cultural difference and avoidance of interaction with cultural difference. The Reversal Scale indicates a worldview that reverses "us" and "them" polarization of the Defense Cluster - where "they" are superior. The Minimization Scale, indicating a worldview that highlights cultural commonality and universal values, is made up of the Similarity Cluster (a tendency to assume that people from other cultures are basically "like us") and the Universalism Cluster (a tendency to apply one's own cultural values to other cultures). The Acceptance and Adaptation Scale, indicating a worldview that can comprehend and accommodate to complex cultural difference, includes the Acceptance Cluster (a tendency to recognize patterns of cultural difference in one's own and other cultures) and the Adaptation Cluster (a tendency to shift perspective and behavior according to cultural context). The Adaptation Cluster is further divided into Cognitive frame-shifting and Behavioral code-shifting. Finally, the Encapsulated Marginality Scale indicates a worldview that incorporates a multicultural identity with confused cultural perspectives.

Methods

To determine the relationships of the scores of the ITP Pre-TOEFL (hereafter referred to as TOEFL), the CCAI and the IDI, the three measures were administered to our first-year students (n = 54), on two separate occasions. The CCAI (with a Japanese translation of the items enclosed) and the IDI (the

Japanese version) were administered in April, 2004. The TOEFL was administered in June, 2004, as is routine for each incoming class of the department. (Recall that the TOEFL is administered for incoming and outgoing students to compare each class' progress.)

All measures were identified with student numbers. Each students' set of test scores were then coded with a randomly generated number to mask identity.

The three measures were scored and the scores tabulated. Students' TOEFL scores were then paired with their corresponding CCAI for correlation, and with their IDI for correlation, to determine whether the measure of language ability varied with cross-cultural awareness ability. Finally, the students' CCAI and the IDI scores were correlated to determine whether they varied jointly with one another.

Results

TOEFL. The mean TOEFL score for the students was 383.85, with a standard deviation of 32.44. A score in the high 300's generally suggests low-intermediate ability. The standard deviation indicates that students' scores varied about the mean, with a distance of 32 or 33 points from the mean being most typical. These results are similar to previous entering classes' mean TOEFL scores (the TOEFL mean of the preceding six class cohorts is 387.4).

CCAI. The results for the students' scores on the four CCAI scales are shown below in Table 1.

	ER	FO	PAC	PA
Mean	68.76	60.82	42.47	28.53
Std Dev	11.16	7.66	5.16	3.96
Normative Mean	79.58	66.92	46.47	32.88
Normative StdDev	8.28	7.76	4.96	3.78

Table 1. Means and standard deviations for the four CCAI scales. Means and standard deviations generated in normative testing (Kelley and Myers, 1995) are also shown.

Students achieved means of 68.76 on the Emotional Resiliance Scale, 60.82 on the Flexibility and Openness scale, 42.47 on the Perceptual Acuity scale, and 25.53 the Personal Autonomy scale. Student means were compared with the means and standard deviations found from normative sample on the CCAI with a group of 653 subjects (Kelley and Myers, 1995). Normative means and standard deviations are also shown in Table 1. The student means were well below the means of the normative sample, averaging about 1 standard deviation below the normative means across the four scales.

While the students' average scores were below norms on all scales, certainly some students scores were within the range of the fifth stanine (Kelley and Myers, 1995), which indicates, in a normal distribution, where the middle 20% of scores cluster: 4 students' scores fell in the fifth stanine on the ER scale, 14 students' scores on the FO scale, 3 students' scores on the PAC scale, and 8 students on the PA scale.

IDI. We are not aware of any published data on norms for the IDI. The Overall Perceived Intercultural Sensitivity Profile, which indicates the stage that the group sees themselves in or would like to be in, had a score of 117.5 for the group as a whole. As shown in Figure 1, this would put the group just in the Acceptance phase of the DMIS. This group's members see themselves as aware of cultural differences and able to adjust their behavior to suit different circumstances. However, the group's Overall Developmental Intercultural Sensitivity Profile, which measures actual sensitivity to cultural difference as revealed by the IDI, shows a score of 82.3. This score puts the group at the end of the Defense/Reversal stage of development, considerably behind their perceived score, a very common occurrence on the IDI.

Denial/Defense	Minimization	Acceptance/Adaptation
82.3		117.5
Developmental Sensitivity		*Perceived Sensitivity*

Fig. 1. Location of the students' Overall Perceived Intercultural Sensitivity (117.5) and Overall Developmental Intercultural Sensitivity (82.3) scores in the IDI scales.

Examining each section, or cluster, of the IDI individually reveals interesting information about the students' attitudes toward cultural difference. The results are very complex though, and as it is not possible to see an individual student's combination of responses, it is difficult to draw specific conclusions. However, in Figure 2 (below), we summarize the results for each scale and its components.

	Unresolved	**In Transition**	**Resolved**
Defense/Denial Scale		*	
Denial Cluster			*
Disinterest		*	
Avoidance			*
Defense Cluster		*	
Reversal Scale		*	
Minimization Scale		*	
Similarity Cluster		*	
Universalism Cluster		*	
Acceptance /Adaptation Scale		*	
Acceptance Cluster		*	
Adaptation Cluster		*	
Cognitive frame-shifting		*	
Behavioral code-shifting		*	
Encapsulated Marginal Scale		*	

Figure 2. Summary for Intercultural Development Inventory Results.

The results for the Denial/ Defense Scale put the group at the very end of the In *Transition* section. Students largely disagreed with statements in favor of maintaining distance from culturally different

people. For example, 57.1% chose the response "disagree" after reading the statement, "It is appropriate that people do not care what happens outside their country" . Only 5.4% agreed completely with this statement. The students, however, did not seem to be optimistic about the idea of different cultural groups co-existing peacefully. 46.4% chose "agree more than disagree" when faced with the statement, "Too much cultural diversity is bound to lead to divisive conflict" .

In the Defense Cluster, we don't, in general, see feelings of cultural superiority. In fact, the most common answers on questions such as "If only other cultures were more like ours, the world would be a better place" were "disagree" (44.6% on that particular question). But 21.4% agreed with the proposition that "It is appropriate that members of our stronger culture have more opportunities" and an additional 55% of the students partially agreed with this statement.

The Reversal Scale, indicating a worldview where other cultures are perceived as being superior to ones own, showed that the students are in transition. For example, 73.2% either disagreed or disagreed more than agreed with the statement "If only our culture was more like other cultures, the world would be a better place." On the other hand, 58.9% agreed or agreed more than disagreed with "People of other cultures are more interested in improving themselves than we are" .

The group is also In Transition on the Minimization Scale with nearly identical scores for the Minimization Scale as a whole and the two Clusters that make up the scale, the Similarity Cluster and the Universalism Cluster. In the Similarity Cluster, 48.2% of students disagreed with "People are the same; we have the same needs, interests, and goals in life." Only 3.6%, however, disagreed with "Despite some cultural differences, it is more important to recognize that people are alike in their humanity." In the Universalism Cluster, the responses were less certain. The largest percentages of responses to statements such as "Because there are universal values, cross-cultural conflicts can be resolved" were "Disagree some and agree some" .

The Acceptance and Adaptation Scale score also showed the group to be *In Transition* on this scale. In the Acceptance Cluster, students agreed more than disagreed with statements such as "I am often aware of cultural differences in how decisions are made" . In the Cognitive portion of the Adaptation Cluster, the largest percentage of students (39.3%) chose "Disagree some and agree some" after reading "While I see myself as a member of my own culture, when I am in one or more other cultures, I find myself thinking like a member of that group." In the Behavioral portion of the Adaptation Cluster, students generally agreed with statements about their ability to change behavior in other cultural settings, but while 51.8% chose "agree more than disagree" in response to the statement "When I come in contact with people from a different culture, I change my behavior to adapt to theirs", only 16.1% chose "agree" . In addition, 42.9% disagreed with the statement "I often act as a cultural bridge between people from different cultures"

On the EM Scale, which indicates a worldview that incorporates a multicultural identity with confused cultural perspectives (often the case with truly bicultural people) and is not divided into clusters, the group's score also fell in the In Transition area. Students did not tend to agree with statements about

feeling "without a culture" . 66.1% either chose disagree or disagree more than agree with the statement "I feel rootless because I do not think I have a cultural identification" .

Correlation of the TOEFL and the CCAI; correlation of the TOEFL and the IDI. There appeared to be no notable relationship between the TOEFL and the measures of cultural development, the CCAI and IDI. The values can be seen in Table 2.

CCAI

	ER	FO	PA
TOEFL	0.06	0.07	-0.03

IDI

	Perceived	Developmental
TOEFL	-0.04	-0.01

Table 2. Correlation of the TOEFL and the four dimension of the CCAI (Emotional Resiliency, Flexibility and Openness, Perceptual Acuity, and Personal Autonomy). Correlation of the TOEFL of the two dimensions of the IDI (Perceived, Developmental)

All correlations were less than r = .08. This suggests that language proficiency as measured by the TOEFL appears to be essentially independent of the students' cross-cultural development.

Correlation of the CCAI and the IDI. As may be expected, correlations between elements of the CCAI and the IDI were stronger than either cultural development measure with the TOEFL. The results are shown in Table 3.

	IDI	
CCAI	Perceived	Developmental
ER	0.26	0.19
FO	0.26	0.17
PAC	0.32*	0.17
PA	0.15	0.04

Table 3. Correlation between the dimensions of the CCAI (ER, FO, PAC, PA) and the IDI (Perceived, Developmental). (*significant at p = .05)

Table 4 shows the correlations between the CCAI and the IDI are low, and only one is significant at the p = .05 level, that of the IDI's Perceived awareness of cultural difference and the CCAI's Perceptual Acuity. All other correlations are not significant.

Discussion

Since this study is on-going and exploratory in nature, there is no formal hypothesis being examined. Rather, our investigation has as much to do with attempting to understand what our instruments are measuring, as with students' actual scores on the measures. Recall that we were interested in our students' English language ability, as measured by the TOEFL, and their level of cross-cultural awareness, as measured by the CCAI and the IDI. Additionally, we were curious to know if the language ability might have a relationship to the cross-cultural measures, or the two cross-cultural measures with one another.

As to informal predictions, we might reasonably guess from previous class populations that the language level of our incoming 2004 students, as measured by the TOEFL, is low-intermediate level. Indeed, this is what we found.

Given general knowledge of our student populations, we could also informally guess that their cross-cultural experience is largely limited to a small number who have experienced short-term abroad trips, and a fair exposure to English-language movies, music, and news events from English-language countries. As such, we would not expect our students to have a deep or sophisticated awareness of cultures outside their own, nor would we expect our students to be prepared to systematically or analytically consider cultural differences.

The results of the CCAI measure indicate that our students as a group rank below the norms of this measure, indicating only a very modest readiness to adapt to other cultures, compared to the results from the normative sample. The results of the IDI reflect something similar. Although the students' perceptions of their intercultural sensitivity seems quite developed, the IDI's developmental score suggests a very modest real perception of cultural differences. On the other hand, the fact that the students are "in transition" on all scales of the IDI suggests substantive awareness that cross-cultural differences exist, even if they do not show full understanding and acceptance of such differences. Perhaps this is not unsurprising, given the students' selection of a major in international cultural studies.

The correlations of the TOEFL scores with the scores of the CCAI and IDI suggest that, at least by these measures, the students' language ability and their cross-cultural awareness have no systematic relationship. It is not an unreasonable result, since we can envision cases of people having a high level of familiarity with a foreign culture, or having a high level of foreign language ability while having little direct contact with the foreign culture or its people.

Correlations among the four dimensions of the CCAI and the two dimensions of the IDI show small but insignificant relations, with the exception of the Perceptual Acuity dimension of the CCAI and the Perceived (intercultural sensitivity) dimension of the IDI. It may indeed be that these two measures have something in common: Both reflect self-reported awareness of culture. The person high in Perceptual Acuity is said to be attentive and sensitive to language, emotion, and behavior, accurately perceiving these in a foreign context. People high on the Perceived dimension of the IDI presumably see themselves as readily recognizing cultural difference. Both measures reflect a social desirability bias, i.e. that it is socially desirable to be cross-culturally aware.

Conclusion

It remains to be seen what changes, if any, will appear in our students scores on the TOEFL, CCAI, and IDI at the end of their two-year program. Our academic program has modest experiential contact with other cultures with the presence of two native-speaking English faculty (ourselves) and optional short-term (two-week) abroad trips to the U.S. or Korea, with substantive classroom time on both foreign and domestic/regional culture. Given this, we do not realistically anticipate large score gains in these measures at the end of their program. Nonetheless, we do believe our program does affect our students' thinking and perspectives, and the measures of cross-cultural awareness comprise an initial attempt to document these changes. This preliminary report gives us a baseline from which to launch future measures, and use of the CCAI and IDI give us a conceptual and theoretical framework to use in the characterization of students' emerging internationalization.

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